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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,787	03/04/2004	Mi Xiaoyu	040089	5333
23850	7590	03/14/2006		
ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP 1725 K STREET, NW SUITE 1000 WASHINGTON, DC 20006				
			EXAMINER TAMAI, KARL I	
			ART UNIT 2834	PAPER NUMBER

DATE MAILED: 03/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

### Office Action Summary

Application No.

10/791.787

Applicant(s)
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XIAOYU ET AL.

Examiner

Tamai I.E. Karl

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2005.  
2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/4/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Group II, claims 3 in the reply filed on 12/28/2005 is acknowledged. The traversal is on the grounds that all the inventions are directed to a micro-oscillating element therefore should be considered as an election of species is not persuasive. This is not found persuasive because the micro-oscillating element can have many different independent and distinct inventions such as plate springs, torsion springs, base springs, actuators details, gimbal details, substrate details, oscillating plate details, rotating mirror details, etc... The Applicant's argument regarding a species election of figures 12 and 13 are not persuasive because the oscillator with both torsion springs and plate springs as shown in figure 12 is independent and distinct from the oscillator with only plate springs or with plate springs and base springs. There are multiple species for the plate springs as shown in figures 1-9 or the species of the torsion springs as shown in figures 12-16.

The requirement is still deemed proper and is therefore made FINAL.

### ***Specification***

2. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

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3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 3, are 13 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Tsuboi et al. (Tsuboi)(US 2003/0007262). Tsuboi teaches an oscillating mirror plate 114 supported by the first and second plate springs 310 on frame 110.

6. Claims 1, 3, are 13 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Minamoto et al. (Minamoto)(US 6122089). Minamoto teaches an oscillating mirror plate 106 supported by the first and second plate springs 102 on frame 103.

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7. Claims 1, 3, are 13 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Tokuda (JP 2002214,560). Tokuda teaches an oscillating scanner plate (inherently a mirror) 102 supported by the first and second plate springs 104 on frame (figure 5).

8. Claims 1, 3, are 13 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Murakami et al. (Murakami)(US 2003/0117687). Murakami teaches an oscillating mirror plate 50 supported by the first and second plate springs 52, 54 on frame 62.

9. Claims 1, 3, are 13 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Arima (US 2003/0053186). Arima teaches an oscillating mirror plate 352 supported by the first and second plate springs 354 on frame 356. Arima teaches the mirror plate 122 supported by plate torsion springs 118 on frame 120.


10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl I.E. Tamai whose telephone number is (571) 272 - 2036.

The examiner can be normally contacted on Monday through Friday from 8:00 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Darren Schuberg, can be reached at (571) 272 - 2044. The facsimile number for the Group is (571) 273 - 8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Karl I Tamai  
PRIMARY PATENT EXAMINER  
March 10, 2006



KARL TAMAI  
PRIMARY EXAMINER